

AMENDMENTS TO THE CLAIMS

List of Claims:

1. (Currently Amended) A fibre ~~based on~~ comprising polyolefin polymer, said fibre having ~~at least one of the features selected from the group consisting of~~ the features:

i) a fibre/fibre friction of no more than 600 g;

ii) a spin finish ~~comprising~~ consisting essentially of an aqueous emulsion of polysiloxanes, with at least 25% of the active content being polysiloxanes; and

iii) ~~a draw ratio at least 1:1.5; iv)~~ a fibre crystallinity of at least 50%.

2. (Original) A fibre according to claim 1 wherein the fibre/fibre friction is no more than 500 g.

3. (Original) A fibre according to claim 1 wherein the fibre/fibre friction is 200 to 600 g.

4. (Original) A fibre according to claim 1, wherein the spin finish consists essentially of an aqueous emulsion of polysiloxanes of at least 30% active content.

5. (Currently Amended) A fibre according to claim 4, wherein the spin finish is applied at a concentration of 2-15% wt/wt active content.

6. (Currently Amended) A fibre according to ~~any one of~~ ~~claims 4 to 5,~~ claim 4, wherein the spin finish level is 0.2 to 1% wt/wt with respect to the fibre.

7. (Original) A fibre according to claim 1, wherein the fibre crystallinity is at least 55% as measured by DSC or XRD.

8. (Original) A fibre according to claim 1, wherein the polyolefin polymer is a nucleated polymer.

9. (Currently Amended) A fibre according to claim 1, wherein the polyolefin polymer is a nucleated polymer, wherein the nucleating agent is selected from the group consisting of talc, metallic salts of aliphatic or aromatic carboxylic acids, branched polymers containing dendritic branches and minerals ~~such as~~ selected from the group consisting of chalk, gypsum, clay kaolin, mica, and silicates and compounds that are based on D-sorbitol ~~and 1,3-2,4-bis-(3,4-dimethylbenzylidene)-D-sorbitol.~~

10. (Original) A fibre according to claim 9, wherein the nucleating agent is talc.

11. (Original) A fibre according to claim 9, wherein the polyolefin polymer is a nucleated polymer, nucleated with 5000 to 10000 ppm of talc.

12. (Original) A fibre according to claim 1, wherein the polyolefin is selected from the group consisting of isotactic or syndiotactic polypropylene homopolymers, homo and copolymers of monoolefins such as ethylene, propylene, alphaolefins , 4-methyl-1-pentene and blends thereof, linear polyethylenes, high density polyethylene, low density polyethylene, and linear low density polyethylene and blends of the same.

13. (Original) A fibre according to claim 9, wherein the polyolefin is selected from the group consisting of homopolymer polypropylene and homopolymer polyethylene.

14. (Original) A fibre according to claim 9, wherein the polyolefin is homopolymer polypropylene.

15. (Original) A fibre according to claim 1 with a bulk of at least about 30 cm³/g.

16. (Original) A fibre according to claim 1, wherein the draw ratio is about 1:2 to 1:8.

17. (Original) A fibre according to claim 1 having an ST dtex value of 2 to 20 dtex.

18. (Currently Amended) A fibre ~~based on polyolefin~~ according to claim 1 having a resilience of at least about 40%.

19. (Currently Amended) A fibre according claim 1 ~~or 18~~, wherein the polyolefin has a flexural modulus of at least 1500 MPa.

Claims 20-21 (Cancelled)

22. (Currently Amended) A fibre ~~based on~~ comprising polyolefin polymer according to claim 1 ~~or 18~~, wherein the polyolefin polymer is a nucleated polymer, and said fibre has

- i) a fibre/fibre friction of no more than 600 g;
- ii) a spin finish ~~comprising~~ consisting essentially of an emulsion of polysiloxanes;
- iii) a draw ratio of at least 1:1.5 with a final fibre fineness of 2 to 10 dtex;

iv) a fibre crystallinity of at least 50%.

23. (Currently Amended) A non-woven material prepared from a polyolefin-based staple fibre as defined in any one of claims ~~1-22.~~ 1-19 and 22.

24. (Currently Amended) A non-woven material ~~based on~~ comprising polyolefin-based staple fibre, wherein the non-woven material has a bulk of at least 30 cm³/g and a resilience of at least 50%.

25. (Currently Amended) A non-woven material according to ~~any one of claims 23 to 24,~~ claim 24, wherein the non-woven material has a resilience of at least 55%.

26. (Currently Amended) A non-woven material according to any one of claims ~~23~~ 24 to 25, wherein the nonwoven material has bulk of at least 35%.

27. (Currently Amended) A method of preparing a polyolefin-based fibre, said method characterised in the use of a nucleated polymer, a draw ratio of at least 1:1.5 with a final fibre dtex of 2 to 10 dtex., and a spin finish ~~comprising~~ consisting essentially of an emulsion of polysiloxanes.

28. (Currently Amended) A method according to claim 27, wherein the polymer is selected ~~from~~ from polyethylene and polypropylene.

29. (Original) A method according to claim 27, wherein the draw ratio is 1:2 to 1:8.

30. (Currently Amended) A method according to claim 27, wherein the spin finish consists essentially of an aqueous emulsion of polysiloxanes, with at least 25% of the active content being polysiloxanes.

31. (Currently Amended) A method according to claim 30, wherein the spin finish is applied at a concentration of 2-15% wt/wt active content.

32. (Original) A method according to claim 30, wherein the spin finish level is 0.2 to 1% wt/wt with respect to the fibre.

33. (Currently Amended) A method of preparing a non-woven material comprising the use of a fibre as defined in any one claims 1 to ~~22~~ 19 and 22, or the use of a fibre prepared

according to the method according to any one of claims 27 to 32,
comprising the steps of

- (a) forming a fibrous bond comprising said fibres, and
- (b) bonding the fibrous web.

34. (Original) A method according to claim 33, wherein the fibres are oven-bonded at a temperature of 130 to 150 °C.

35. (New) A fibre according to claim 1, wherein the fibre crystallinity of at least 50 % is achieved by:

- iv) a draw ratio of at least 1:1.5; or
- v) the polyolefin polymer being a nucleated polymer.

36. (New) A fibre according to claim 1, wherein the spin finish is an external spin finish.